



ILLINOIS 47

US Route 14 to Charles Road

Illinois Route 47 Public Meeting #3

July 9, 2014





Meeting Purpose

- Project overview
- Review Purpose and Need
- Present alternatives being considered
- Seek your feedback on intersection alternatives and access management
- Next Steps



Study Purpose

- In-depth look at:
 - Existing roadway
 - Safety and capacity
 - Drainage issues
 - Analysis of future transportation needs



Project Overview





IDOT Process

We Are
Here

Preliminary
Engineering
FUNDED
(Phase I)

Contract Plan
Preparation
FUNDED
and
Land Acquisition
NOT FUNDED
(Phase II)

Construction and
Construction
Engineering
NOT FUNDED
(Phase III)

Winter of 2015

1 ½ to 2 years

2 to 3 years

Study Overview



- *Following Federal National Environmental Policy Act (NEPA) process*



Context Sensitive Solutions (CSS)

- *CSS will facilitate an open study process*
- *Fully engaging stakeholders*
- *Resulting in a Preferred Alternative*

Public Involvement



Public Meetings



Citizens Advisory Group (CAG) Meetings



What we heard!

- Roadway Safety
- Travel Delays
- Number of access points
- Lack of multi-modal facility
- Lack of turn lanes

One-on-One Meetings





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Purpose & Need





IL 47 – Purpose and Need

Purpose:

The purpose of the project is to address transportation safety, capacity, access management, pedestrian and bicycle needs, and geometric deficiencies.

Needs:

- Safety
- Capacity/Operations
- Access Management
- Bicycle/Pedestrian Accommodation
- Geometric Deficiencies

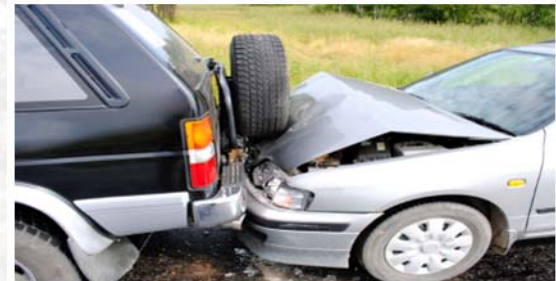




Purpose and Need – Safety & Capacity

Safety

- 399 crashes from 2010-2012
 - Majority rear-end (60% of total)
 - Turning: 16%
 - Angle: 13%
 - 120 injury crashes



Operation and Capacity Deficiencies

- Existing vehicles per day - 26,200
- Projected average vehicles per day - 35,000

Purpose and Need – Access Management



- Maintain access to properties while minimizing impact to roadway operations
- Utilize access management in order to improve travel flow throughout the corridor
- As the frequency of driveways and access points increases, so does the crash rate.
- IL Route 47 from US 14 to Ware Road has a driveway frequency of 50 driveways per mile.

Purpose and Need – Accessibility



Non-Motorized Transportation

- Sidewalks are intermittent
- No bike paths in corridor
- Limited pedestrian crossings
- Hindering access to existing public transportation facilities





Purpose and Need – Geometric

Geometric Deficiencies

- 7 of 11 major intersections have sharp angles
- Union Pacific Railroad constriction
- Lack of exclusive turn lanes or insufficient storage length at intersection





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Alternatives Development





Alternatives Development

- Alternatives development combines:
 - Stakeholder input to date
 - CAG assistance
 - Traditional intersections
 - Roundabouts
 - Project purpose and needs
 - Analysis of existing environment
 - Technical analysis of design requirements and constraints



Evaluation Criteria

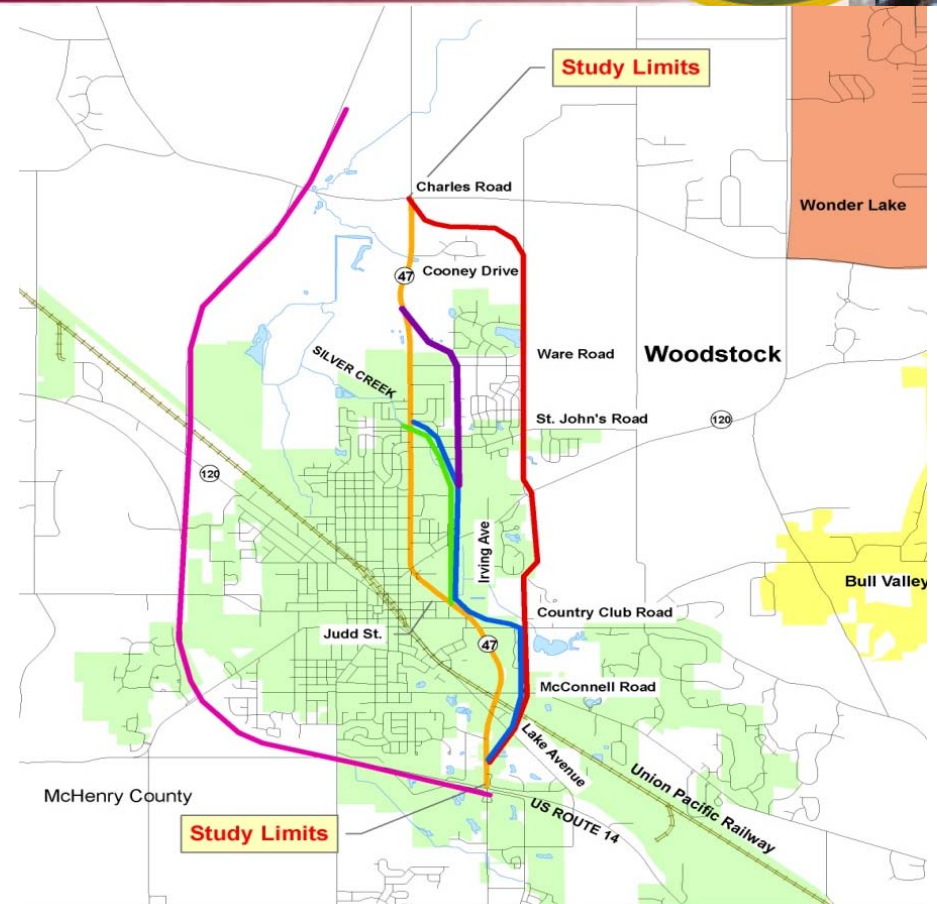
- Environmental impacts
- Accessibility
- Identified needs
- Property impacts
- Construction costs and maintenance





Full Range of Alternatives

- On-Alignment Alternatives
- Bypass Alternatives
 - B1: Irving to Ware
 - B2: Irving to St. John's
- One-Way Couplet Alternatives
 - C1: Irving to St. John's
 - C2: Irving to Ware
 - C3: Irving to St. John's
 - C4: Irving to Ware
- *By-pass and one-way couplets eliminated from further consideration*



REGIONAL ALTERNATIVES SCHEMATIC
ILLINOIS ROUTE 47 - US ROUTE 14 TO CHARLES ROAD



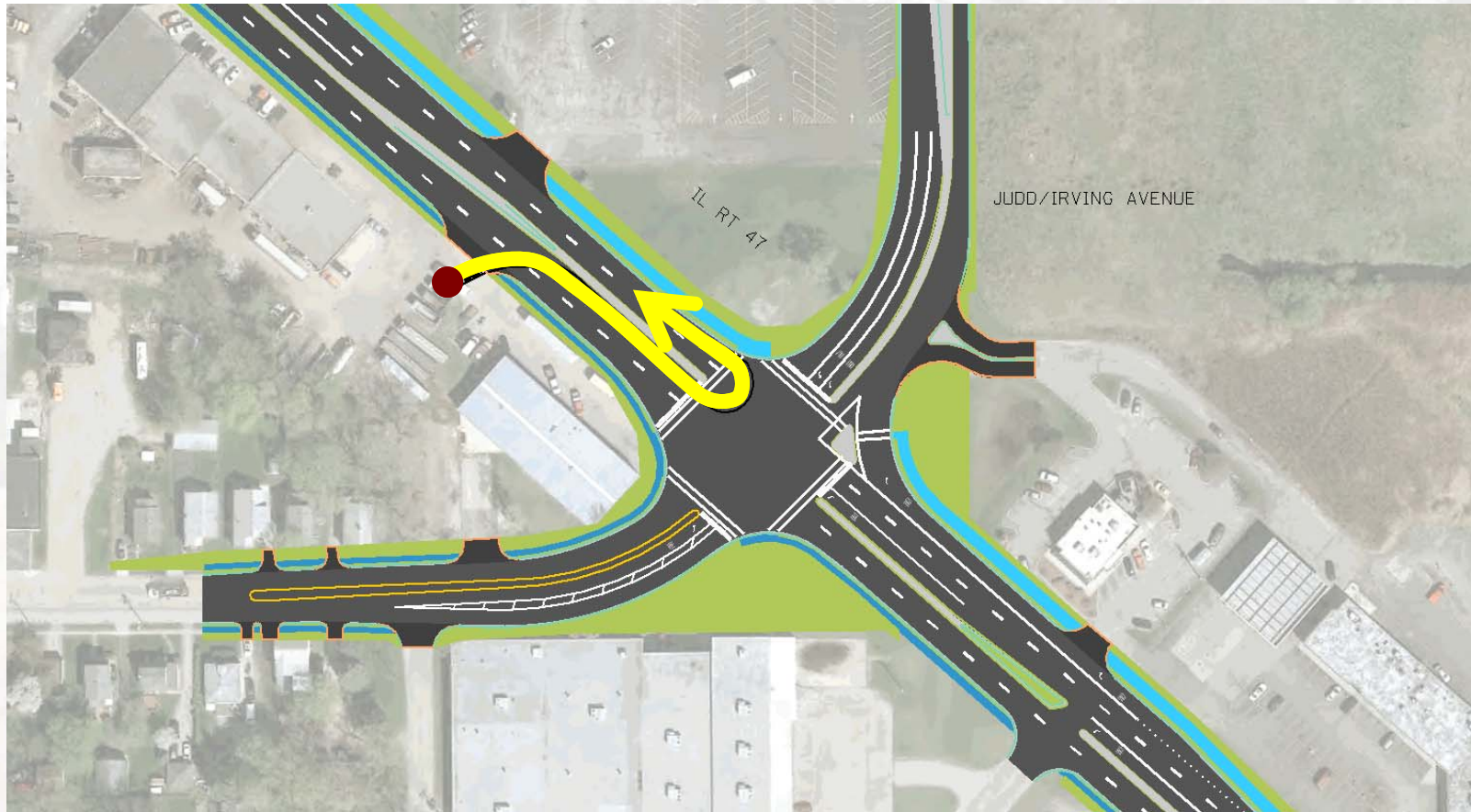


Typical Section Rendering

Looking North from IL Route 120 Intersection



U-Turns – Signalized Intersection





U-Turns - Roundabouts





ON-ALIGNMENT INTERSECTION ALTERNATIVES

INTERSECTION	EXISTING	PROPOSED ALTERNATIVES
Lake Avenue McConnell Road		 or 
Irving Avenue/Judd Street		 or 
St. John's Road	MS	
Ware Road	MS	 or MS
Charles Road		 or 



Roundabout Alternative

MS

Minor Stop



Potential Traffic Signal



All-Way Stop

What is a Roundabout?



Roundabouts provide opportunities to improve safety and operational efficiency, as well as other benefits.

- Fewer conflict points for vehicles
- Lower crash severity
- Vehicle speeds are low (approximately 20 mph)



Pros and Cons of IL 47 Roundabouts



All five proposed Roundabouts along IL 47 exhibit the following:

Pros:

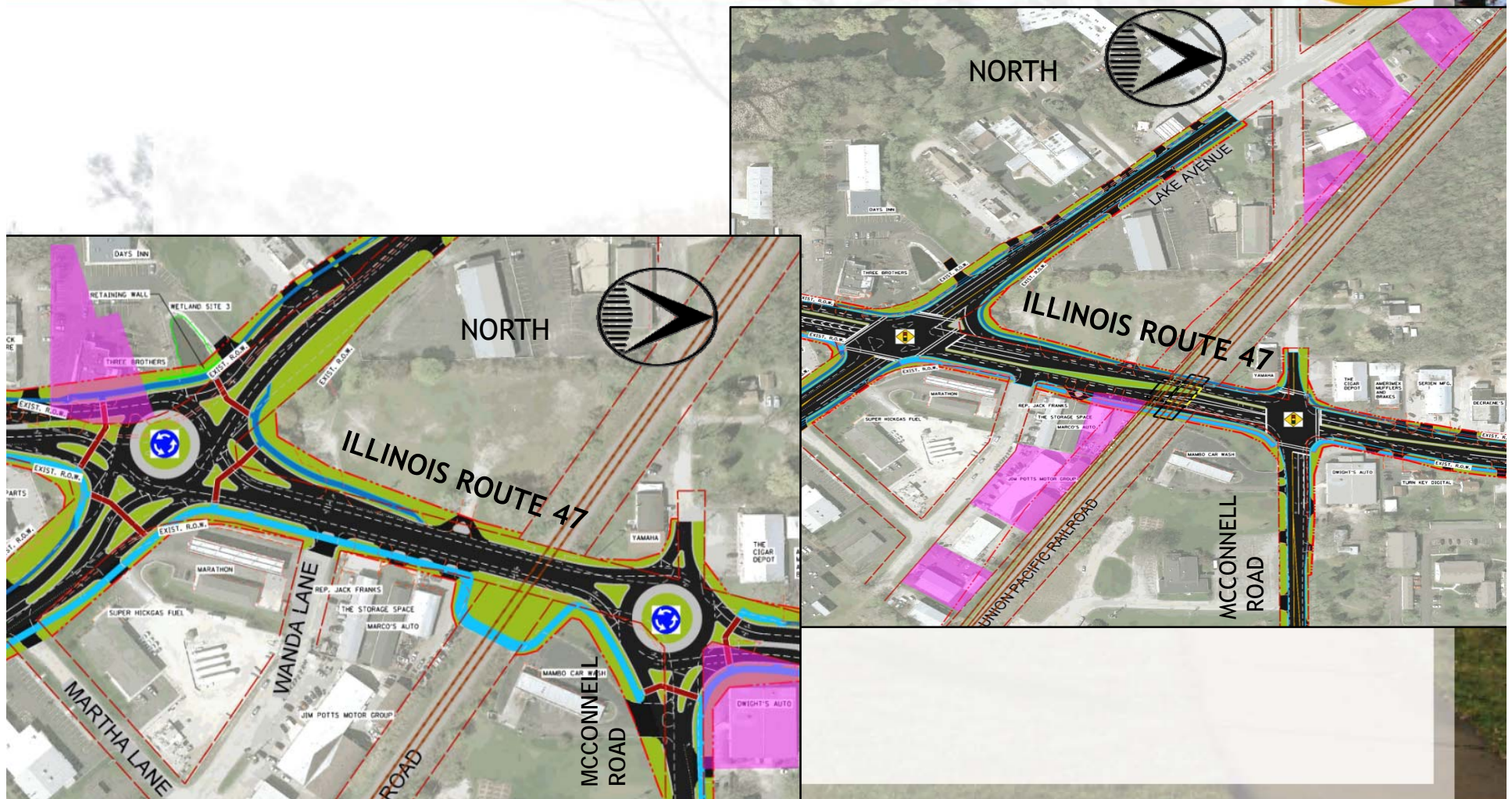
- Less delay
- Less severe crashes
- Fewer conflict points
- Reduced noise
- Pedestrians only look one way for vehicles

Cons:

- New to drivers
- Lighting is required
- No signal to stop traffic for pedestrians



Lake and McConnell



Lake and McConnell Roundabouts



Lake and McConnell must both be Roundabouts or both be Signals

Pros:

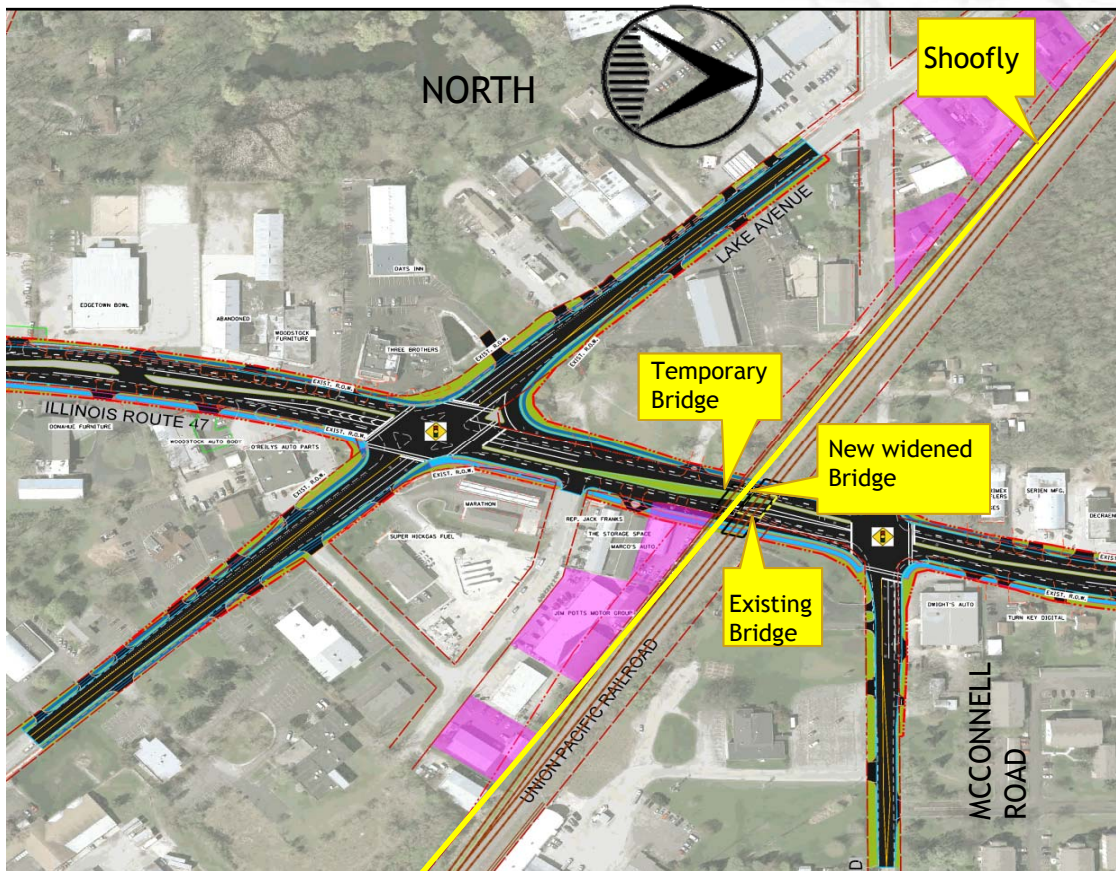
- Addresses Intersection angle
- 4 fewer relocations
- 7 fewer affected parcels
- Does not impact the railroad bridge, saving approximately \$30 million
- Reduces construction schedule 1 to 2 years

Cons:

- Wetland impacts
- Bridge opening does not change

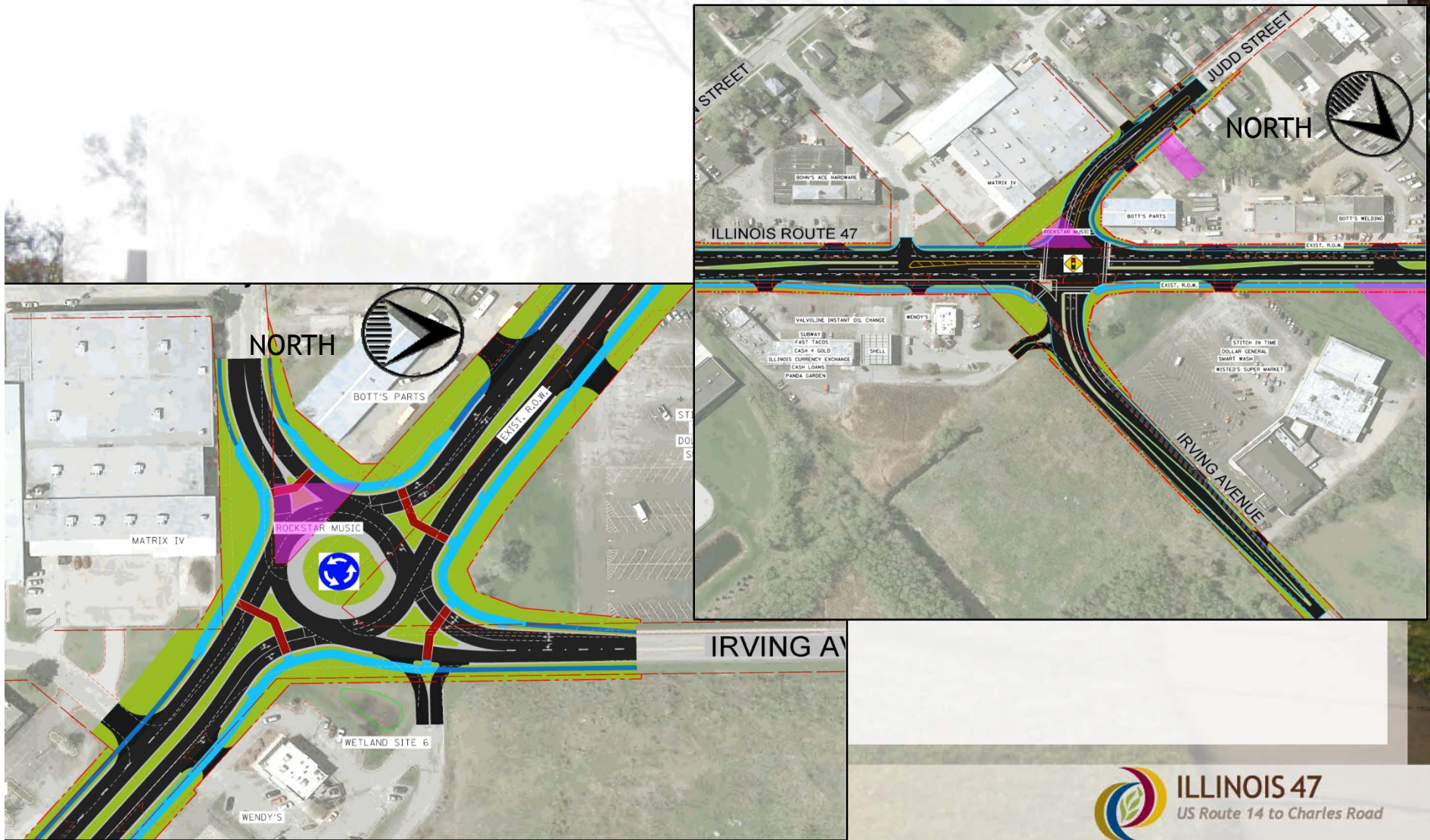


Lake and McConnell Signalized Intersections



- Construction of additional turn lanes
- Require removal of the existing railroad bridge
- New railroad bridge with a wider opening
- Construction of new bridge requires a temporary railroad track called a shoofly
- Estimated additional cost of \$30 million
- 1 -2 years to build the shoofly and permanent bridge prior to roadway construction

Irving Avenue / Judd Street Roundabouts





Irving Avenue / Judd Street Roundabouts

Pros:

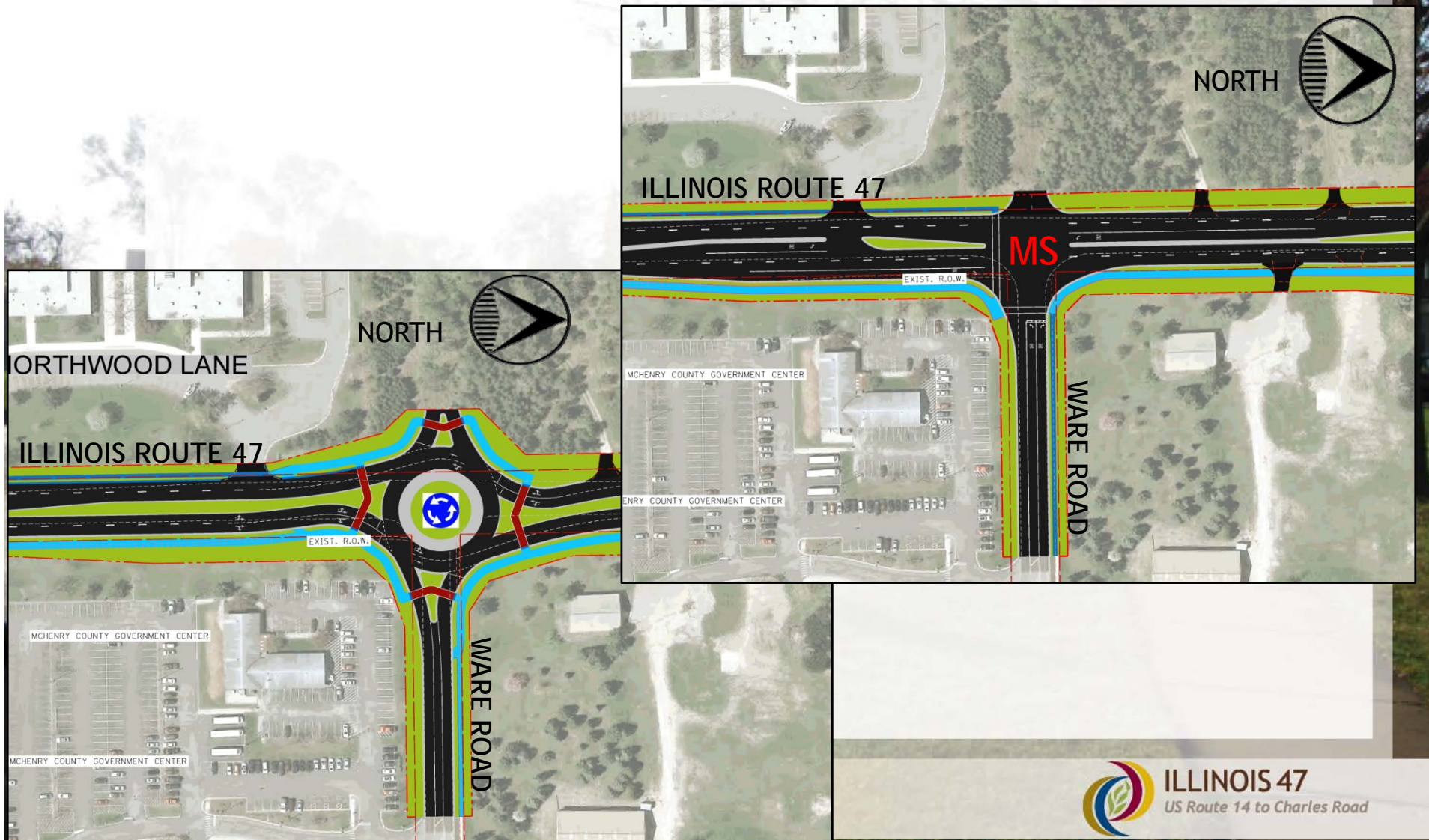
- Addresses Intersection angle
- One less residential relocation
- Works well with Country Club Road and Route 120 signals

Cons:

- More Right of Way required

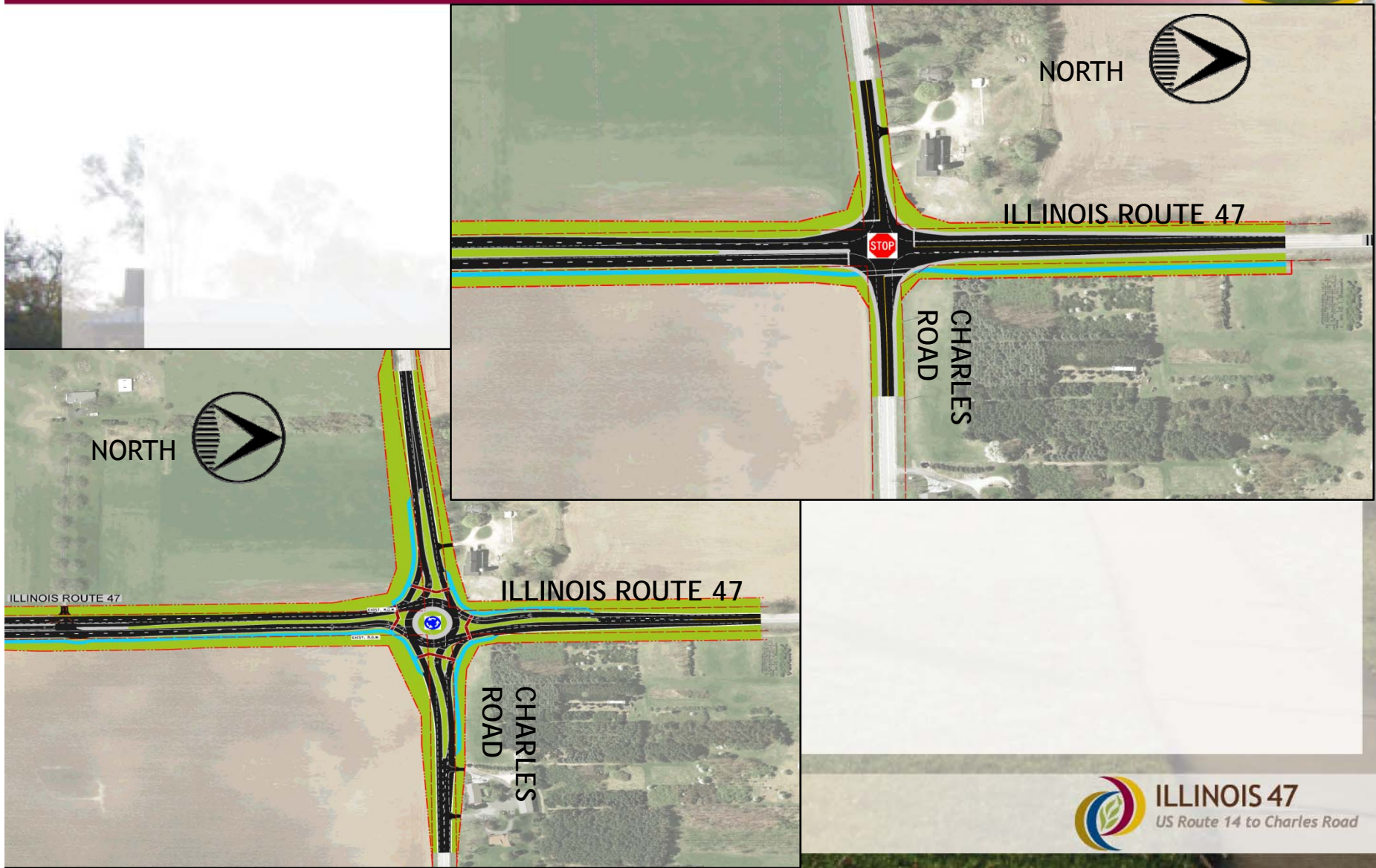


Ware Road





Charles Road



Ware Road and Charles Road Roundabouts



Pros:

- Free flow movement better than a stop sign
- Works well with Russell signal
- Slows traffic entering Woodstock

Cons:

- More Right of Way Required



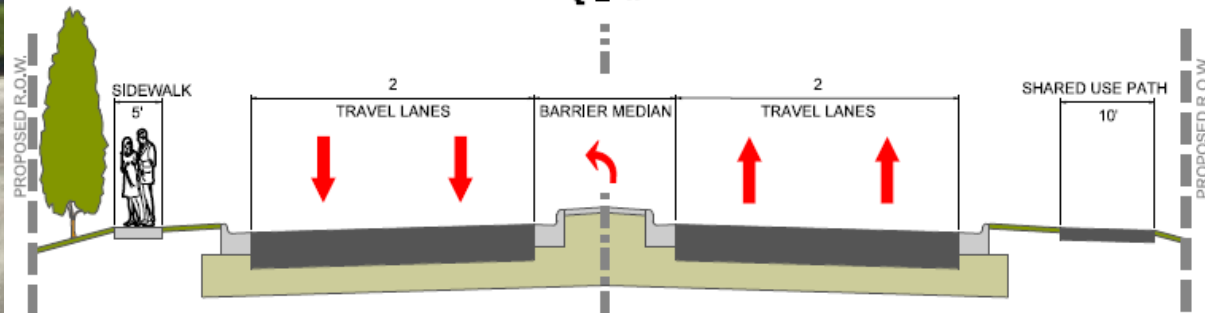
Pedestrian Accommodations

- Proposed 5' Sidewalk*
- ... Proposed 10' Shared Use Path*

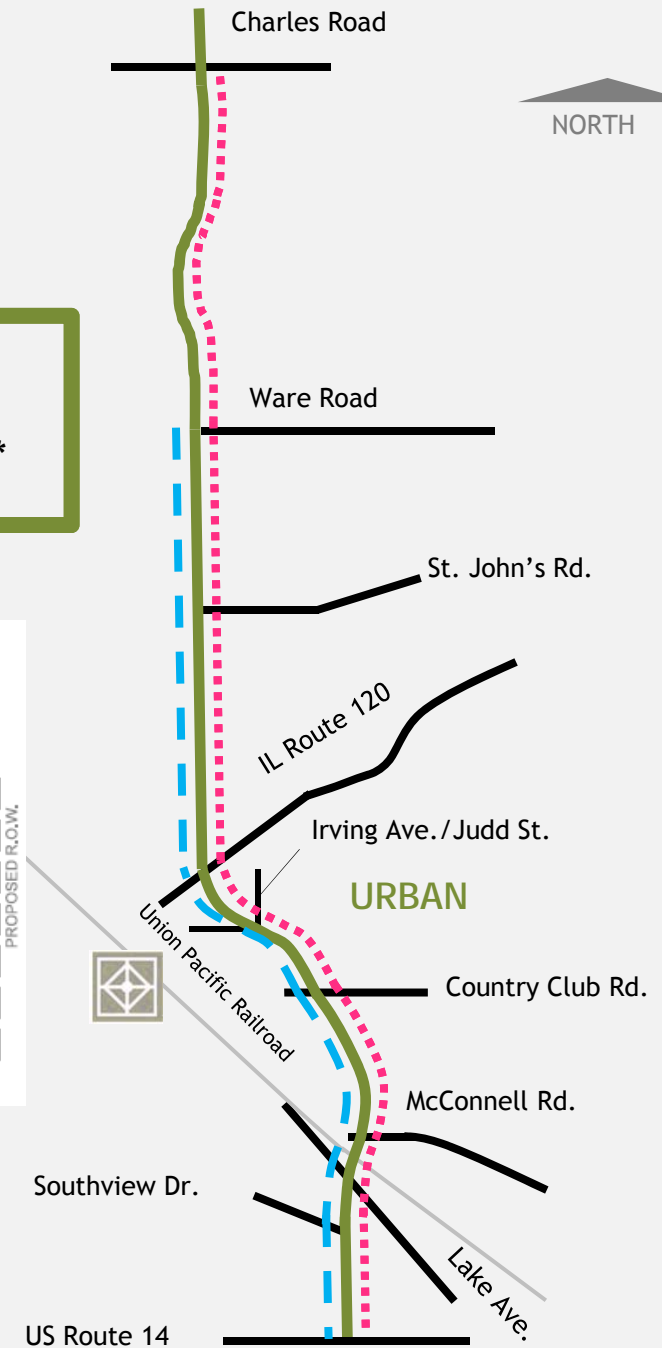
PROPOSED TYPICAL SECTION

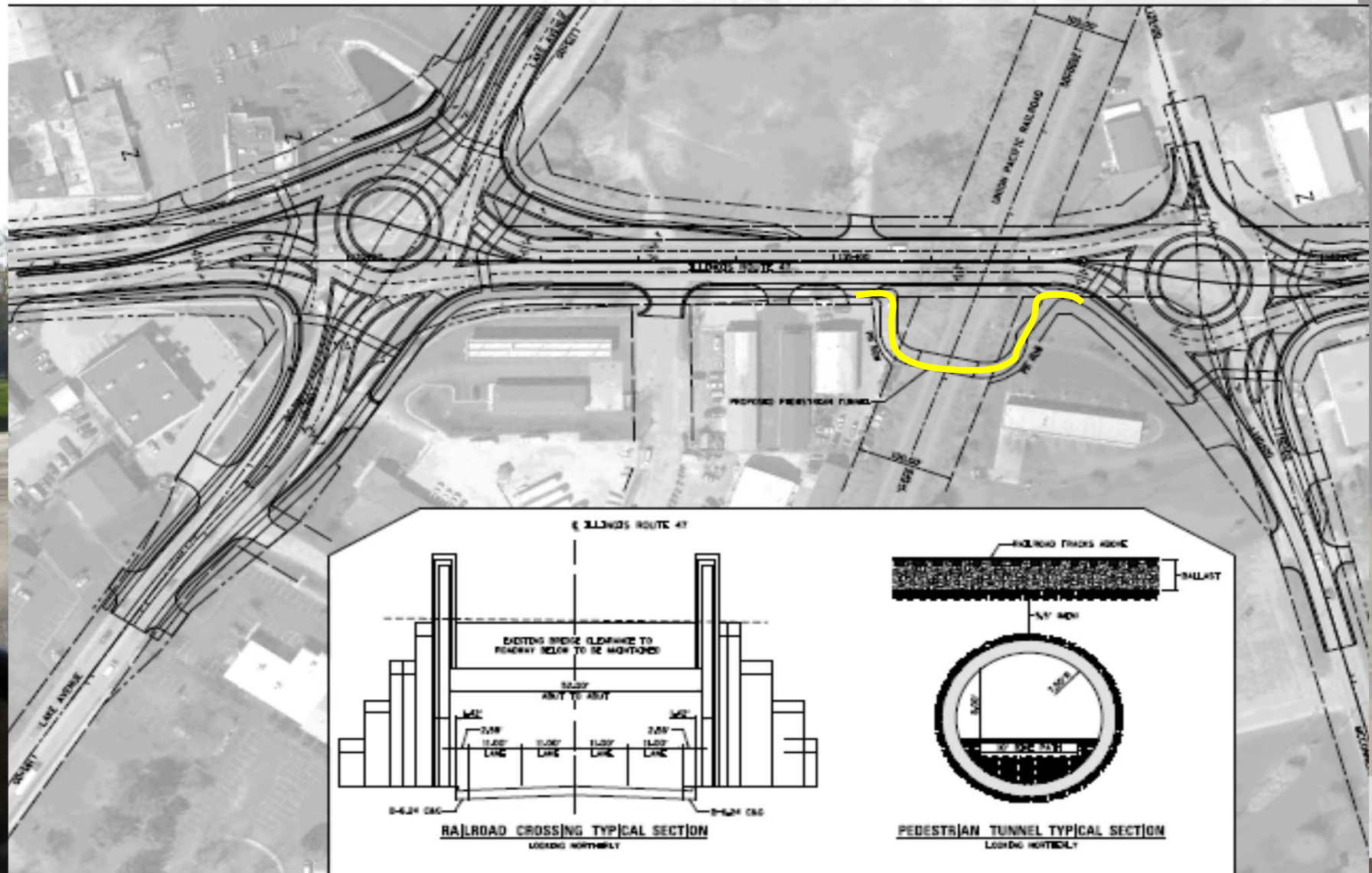
US ROUTE 14 TO CHARLES ROAD

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**Local cost participation and maintenance required*







Project Benefits



- *Continuous Bike/Ped Facility*
- *Safer environment for the motoring public*
- *Better travel environment*
- *Safe access to property/businesses*



Detailed Environmental & Technical Studies

- Avoid and Minimize Impacts
- Public Properties
- Wetlands
- Cultural Resources
- For more information on the potential environmental impacts, please visit the exhibit room
- Technical Studies - Drainage



Land Acquisition

- There will be property impacts
- Right-of-way requirements will be further refined as a recommended Preferred Alternative is identified





Next Steps

- Feedback from today's Public Meeting
 - Refine design details
 - Environmental studies continue
 - Right-of-way needs refined
 - Cost estimate
 - Access consolidation determined
 - Recommended preferred on-alignment alternative
 - Public Hearing Fall/Winter 2014

A photograph of a busy intersection with traffic lights and cars, framed by a yellow oval. The scene shows a multi-lane road with several vehicles, including a silver sedan and a dark SUV, waiting at a red traffic light. The background includes trees and a clear sky.

- [illegible]



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Thank You!

Please visit the exhibit room and meet
with study team members.





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*THE PRESENTATION WILL
START AGAIN MOMENTARILY.*

